

# The Art and Science of Entrepreneurial Leadership in Manufacturing Industries – A Case Study of Selected Manufacturing Units in Industrial Estate, Vijayawada

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## ABSTRACT

The main objective of the empirical research is to identify and study, the styles of leadership in the manufacturing industrial sector in Industrial Estate, Vijayawada. The data was collected through case study method. Out of the 82 manufacturing units in the industrial estate, 50 are selected based on the line of activity and the type of industry, using judgement convenient sampling methods. 50 workers are contacted to assess the working conditions. The success levels of leadership style in terms of profit making employment generation and labour welfare are estimated. The schedule canvassed to the respondents including entrepreneurial leaders and labour leaders and workers are classified analysed to bring out results. The study found that most of the units are owned and managed by a class of entrepreneurs who can be designated as entrepreneurial leaders. An Entrepreneur is one who organises and operates a business Entrepreneurship is characterised by willingness to take up risk in pursuit profit. The present day dynamic world requires a new entrepreneur with new abilities of innovative management and leadership qualities. This type leadership style is entrepreneurial leadership style. The systematic analysis of the production process is the science and the practical application of methods is the art both of which combine into art and science of entrepreneurial leadership. The styles adopted are examined elaborating on the theoretical basis and they are found out to be a combination of autocratic transformational leadership styles with entrepreneur leadership style showing its weight. Leadership by example is also found to be promoting production in some cases. Team building leadership is the essential characteristic of the mixed type of leadership in the manufacturing units taken for study. The workers engaged in the production process are found to be not satisfied and happy because the labour welfare legislation is not found implemented satisfactorily. Labour legislation in the form of implementation of minimum wages Act, industrial disputes Act, workers compensation Act are not usefully applied because, most of the workers were engaged on contract basis without any contract registered under any law. Word of mouth and confidence in the organisation are found to be the guiding factors for continuing labour participation in the industrial production activities. Some sort of protection to labourers is observed in the study. It is that the same batch of labourers are preferred to be reappointed as workers when new orders are placed and opportunities arise for increased production. The labourers are in a way "preferred labourers". The manufacturing activity creates work for 300 to 500 workers every day.

The presence of labour contractors is also observed and the contractor enters into an agreement with the key persons of the companies, the benevolent owners who are entrepreneurial leaders in practice. The production process has been continuing with the Manufacturers Association. The producers earn normal profits. Thus follow the shut down rule, taking initiatives to improve the industrial atmosphere to promote positive industrial environment and labour welfare to the extent possible. Inadequate implementation of labour laws cut throat competition make the industrial atmosphere highly severe and other factors build obstacles for faster industrial growth which is essential for economic development.

**KEYWORDS:** Entrepreneurial leadership, preferred labour, Flexibility practices, shut down rule

## 1. INTRODUCTION

### 1.1. INTRODUCTION

The research is undertaken against background prevailing after the Government of Andhra Pradesh declared industrial development policy 2015-2020. The policy announced various royalties for different sectors including MSMEs (Micro Small and Medium Enterprises). They include manufacturing units undertaken by entrepreneurial leadership. The central and state policies with respect to import and export (exim policy) has built some barriers for enterprising business units, some of which are now taking up activity as start up units. The industrial financial policy and its implications have not been clearly understood and implemented. Despite policy obstacles and other discouraging hurdles, the units have been promoting manufacturing activities providing employment to a considerable extent. Every day 300 to 500 workers find work in these industries. The progress of the units has been taking place to the possible success levels under different styles of leaderships, the companies across normal profits. There are leaders who face constraints and show up their abilities adopting styles of entrepreneurial leadership, mixed with essential elements of behaviour theories, situational theories and Modern theories. The operation of shut down rule is found. The rule says that in short a firm summed continue to operate if price is equal to average variable cost.

## 2. OBJECTIVES, METHODOLOGY AND REVIEW OF LITERATURE

### 2.1. Objectives of the present study are:

1. To examine the entrepreneurial leadership styles and their implementation in the selected manufacturing units.
2. To analyse the problem faced by the units.
3. To assess the impact of implementation of government schemes to the development of manufacturing industry.
4. To suggest policy measures to add to development of the manufacturing sector under appropriate types of leadership.

### METHODOLOGY

The methodology covers the ways in which the research is conducted and results obtained.

### 2.2. Sources of Data

The study has identified the primary and secondary sources of data.

#### 2.2.1. Primary Data

The Primary data was collected employing case study method using a schedule. 50 manufacturing units and 50 labourers including small labour leaders who gather labour to undertake a contract job were taken as respondents and their answers are recorded.

#### 2.2.2. Secondary Data

The Secondary data is collected from secondary sources such as government publications, abstracts available with Andhra Pradesh Industrial Investment Corporation (APIIC). The Vijayawada Industrial Estate Manufacturers Association, District Industrial Centre Vijayawada, Krishna district, Industrial supplementaries published by the International Newspapers like The Hindu and The Hindu Business Line and data made available by Industrial Development Banks.

## 2.3. Description of study area

Vijayawada city is one of the four revenue divisions of Krishna district and is only one Municipal Corporation, Vijayawada industrial park acquired 53.93 acres of land. It is 2,18,255 square meters and the land developed is 1,28,553 square meters with 64 plots and 34 structures. The 64 plots are allotted while 34 are allotted structures.

There is an Autonagar in Vijayawada with 48.83 acres of land acquired, and it is 11,15,677 square meters. The land developed is 1,13,137 square meters with 258 total plots which are allotted. The total number of units in production are 239.<sup>1</sup>

### 2.3.1. The Industrial Estate of Vijayawada

The Industrial Estate was developed by the Government of Andhra Pradesh way back in 1958 with the supreme aim of achieving self-sufficiency. The industrial estate was under the Department of Industries and the industrial establishments were grouped as ABCD categories and were allotted land ranging from 4,000 square yards to 1,000 square yards. The infrastructure was also provided. The buildings for manufacturing unit were rented out during the first five years with 50 per cent royalty. Some vacant sites were divided into plots and they were allotted for rent at a rate of 3 paise (100 paise are in rupee), for the first 5 years. The royalty of 50 per cent is also extended to these occupants. The government has taken up industrial development activity. It has allotted 344 acres of land for the expansion and establishment of different units. As per the records of the Industrial Estate Manufacturing Association, the number of registered enterprises under entrepreneurial leaders is 82 which includes 17 erstwhile Autonagar manufacturing firms. The Vijayawada Industrial Estate Manufacturers Association came into existence in the year 1962.

There were difficult phases in the development of the Industrial Estate. Despite obstacles, Brass Rolling Screws, Pins, Buckets, Almirahs, Aluminum utensils, oil tankers, machinery spare parts, furniture for office and homes, kitchen ware, motor oils, paper boxes, agriculture implements, chemicals etc., were manufactured during the critical period.

## 2.4 REVIEW OF LITERATURE

Manufacturing sector is the driver of growth and development. Development in economics implies growth with change. The economy transforms acquiring required changes for facilitating growth. Literature on structural transformation throws light like on dimensions of change.

Amirapu and Subramanian<sup>2</sup> summarized the attributes of a sector to be a driver of structural transformation. They are high productivity through reallocation of resources, unconditional convergence to usher in dynamics of productivity growth, ability to expand and absorb resources, including workers, alignment with the country's comparative

<sup>1</sup> APIIC, Hyderabad quoted in Brief Industrial Profile of Krishna District, MSME Development Institute, Hyderabad, pp.6-8.

<sup>2</sup> Amirapu, a., Subramanian, A. (2015). "Manufacturing or services? As Indian illustration of a development dilemma", Centre for Global Development Working Paper, No 409.

advantage, and tradability for exports led growth and development

The share of manufacturing in GVA was also recorded. The share of manufacturing in Gross Value Added (GVA) was just 10 per cent in India in 1950, and it was 17 per cent in 1980. It fell from 16.1 per cent in 2007-08 to 14.9 per cent in 2013-14. The National Manufacturing Policy, seeks to raise the share in GDP to 25 per cent and increase employment in the sector by 100 million by 2022.<sup>3</sup>

Industrialization is an instrument of economic development. Studies observe a phenomenon known as “premature industrialization”. A comparison is made between shares of manufacturing in gross value added and GDP per capita over a period of time. Industrialisation may take place at a lower level of income proving premature industrialization.<sup>4</sup>

There can be an imbalance between output and employment. Indian manufacturing, the organized sector, accounts for over 80 per cent of manufacturing output, while the unorganised sector engages 80 per cent of employment in the sector and represents 99 per cent of all establishments.<sup>5</sup> The employment growth took place in the sector since 1989 was in informal establishments in tradables. During 1989 and 2010 own account works in informal trade sector increased.<sup>6</sup>

The trend in employment generation in India as per the Annual Survey of Industries data for the organized sector shows that the share of food products, beverages and tobacco products in total employment decreased over the post-liberalisation period from 1989-90 to 2010-11, while the share increased in the case chemicals, rubber, plastics and motor vehicles. In the terms of unorganized sector, the share of the same sectors fell in the organized sector (food products, beverages and tobacco products), though the shares had increased in terms of textiles and wearing apparel.<sup>7</sup>

The progress of the manufacturing sector depends upon the decision to produce for domestic or international market. The factor combinations as and management practices impact the role of manufacturing. The market dynamics of markets influence the sector. After reviewing literature on the role of manufacturing and factors that influence the sector and trends in employment and output in the same sector literature on ownership these firms, strategies to be adopted and leadership styles in the manufacturing sector add to the understanding of the research topic taken for study.

<sup>3</sup> Szirmat (2012). Industrialisation as an engine of growth in developing countries, 1950-2005”, Structural change and Economic Dynamics, Vol. 23 (2012), pp.406-420.

<sup>4</sup> Rodrik, D. (2015). “Premature industrialization” NBER Working Paper No.20935.

<sup>5</sup> Ghani, E, Kerr, W.R., Segura, A. 2015. “Informal tradables and the employment growth of Indian manufacturing” World Bank Policy Research Working Paper, No. 7206.

<sup>6</sup> *Ibid.*

<sup>7</sup> Goldar, B., Sadhukhan, A. (2015). “Employment and Wages in Indian Manufacturing post-reform performance”, ILO Employment Working paper, No.185.

Studies reveal that transformation constraints make it difficult for enterprises to be aware of benefits and firms do not expand beyond what family members can manage. They also show that firm’s size had little to do with labour market regulations.<sup>8</sup>

Studies have also explained five strategies to achieve success. They are: adapting products and processes, investing to remove market constraints, leveraging the strengths of the poor, combining resources and capabilities with other organisations and engaging in policy dialogue with government.

The constraints on India’s manufacturing are also explored. India’s manufacturing has been constrained by the overly restrictive labour laws of the country, resulting in fewer jobs in the formal sector. Dominance of small enterprises and the “missing middle”, and capital intensity of production are dimensions that have been linked to the restrictions imposed by the labour laws.<sup>9</sup>

Missing Middle is a phenomenon in which micro enterprises dominate, a few larger firms exist but medium-sized are absent.<sup>10</sup> Literature on the nature of Leadership state that leadership is always associated with people. Leader has a group of people to follow him. When people are willing to accept a leader and want to get influenced by him that person becomes a leader. In the process of leadership both leader and followers are working parties. The aim of leadership is reaching goals and achieving objectives which will be shared by both leader and followers. A leader will never force or compel his followers to accept him as a leader. Leadership is also an influence, it is significant influence on followers and influence of followers is equally powerful on leader. The function of a leader is leadership. Leadership varies according to situations. Situations vary in a dynamic world. The industrial development is dynamic in nature. Social, economic, political technological changes influence the industrial development processes. Leadership is a continuous efforts and it has no end. As long as the production process continues, leaders lead and followers follow and both of them influence each other. Leadership has a psychological element also. The followers perception about the leader determines the success or otherwise of the process of leadership. The effectiveness of leadership process depends upon leaders, followers, situation changes, social influence process and shared purpose.<sup>11</sup>

<sup>8</sup> Bloom, N., Eifert, B., Mahajan, A., McKenzie, D, Roberts, J. (2013). “Does management matter? Evidence from India”, *Quarterly Journal of Economics*, Vol. 128, Issue 1, pp.1-51.

<sup>9</sup> Sher S. Verick (2015). Manufacturing Jobs: Is India Different?” Keynote paper on the theme “Labour and Employment in manufacturing sector at the 57<sup>th</sup> Annual Conference of the India Society for Labour Economics” on 10-12 October 2015, at Srinagar, Jammu & Kashmir, p.21.

<sup>10</sup> Krueger, A.O. (2013). “The Missing Middle Chapter 9 in Economic Reforms in India : Challenges and Prospects and Lessons, edited by Nicholas C. Hope *et al.* Cambridge University Press.

<sup>11</sup> Neelam S. Bhargava and Gaurav Bhargava (2012). “Team Building and Leadership”, Himalaya Publishing House, Mumbai, pp.2-3..



Literature on Leadership styles describes various leadership styles, such as strict autocratic, benevolent autocratic and incompetent autocratic styles as forms of autocratic leadership styles. There are participative leadership styles also known as democratic consultative or ideographic participation. It is defined as a mental and emotional involvement of people to contribute to the goals and share responsibility among the group members. There are also styles based on situational theories, such as Fielder's contingency style Blanchard's situations Model. There are also combination of leadership styles. The leadership styles associated with situations are explained in path-goal Leadership styles. The directive style is appropriate in a situation where positive effect on satisfaction and expectancies of subordinates working on unstructured task, prevails, the supportive style works when positive effect on satisfaction of subordinates working on dissatisfying stressful of frustrating task is evident. The participative style is appropriate in situations where positive effect on satisfaction of subordinates who are ego involved with non-repetitive task. Achievement leadership styles work where positive effect on the confidence that the efforts will lead to effective performance of subordinates working on ambiguous and non-repetitive task.<sup>12</sup>

There are leadership styles based on modern theories. An Entrepreneur is a person with initiative and drive, undertakes the production activity, gathers the necessary inputs, combines them in the required ratio, produces to the demands of the market and gains profits. He is prepared to bear the losses and bears the risk. Because of the risk bearing characteristic of the leadership profits are justified. In modern times, the chief executive officer is a lonely person at the top. The executive burden is only getting heavier, and a VUCA (Volatility, Uncertainty, complexity and Ambiguity) world is not helping.<sup>13</sup> In the prevailing atmosphere the quality of entrepreneur and the team leading abilities characteristics of leader work together to evolve into entrepreneurial leadership to promote industrial activity in terms of generating employment and contributing to national income and labour welfare.

### 3. ANALYSIS OF THE DATA

The analysis of the data is based on the obtaining situation of manufacturing activity in the study area. As per the data collected there are 82 registered industrial manufacturing units registered with the Vijayawada Industrial Estate Manufacturers Association. The details of different industrial enterprises with different number of units are provided in table 1.

<sup>12</sup> Chandra Mohan, A. (2010). "Leadership and Management", Himalaya Publishing House, Delhi, pp.41-50.

<sup>13</sup> Thammailh, B.N. (2019) "CEOs must learn to tone down goal, accept failure", Times ascent Catapult Your career, Vijayawada edition, August 14, 2019, p.15.

Table 1 Number units-wise, line of activity wise manufacturing units in Industrial Estate

S. No.	Type of Unit	No. of Units	Total
1	Single Unit Manufacturing Enterprises	11	1x11=11
2	Two unit Manufacturing Enterprises	6	6x2=12
3	Three Unit Manufacturing Enterprises	3	3x3=9
4	Four Unit manufacturing Enterprises	3	3x4=12
5	Auto-sector based manufacturing enterprises	13	13
6	Electrical equipment based sectors	8	8
7	Engineering based manufacturing	6	6
8	Metal based manufacturing units	11	11
	Total		82

**Source:** Computed from the data provided by the Vijayawada Industrial Estate Manufacturers Association

**Note:** The data relates to the period between 2017-2018 (31-03-2018).

According to the table, out of the 82, 11 are single unit manufacturing enterprises, 6 are with two units. Three unit manufacturing units are three, while 4 unit manufacturing enterprises are also 3. There are 13 automobile sector based manufacturing companies exclusively producing auto-sector implements, along with 8 electrical sector-based units producing electrical equipment. Six engineering sector based enterprises and 11 casting units are found undertaking fabrication and other works.

To examine the leadership style in different manufacture units, a sample of 60 per cent of the total number of units (universe) is taken. Thus, a number of 50 units (60 per cent of the universe) was taken giving due representation to number of units and activities undertaken by the units. The manufacturing enterprises with single unit taken for a study along with the lines of activity are furnished in table 2.

Table 2 Activity-wise, single unit manufacturing enterprises taken for study

S. No.	Manufacturing Enterprise	Line of activity
1	M/s.Pavan Techno Products	Conveyer chains, pelatiseres GM Bushes, M.S. pins.
2	M/s.Venugopal Industries	Reconditioning
3	M/s.Apaz Radiators	Radiators an Oil coolers, Heat Exchanges
4	M/s.Kushalava International Ltd.	Cylinder liners
5	M/s.Packwin Packages Pvt. Ltd.,	Corrugated boxes
6	M/s.Vijaya Casting Works	CID Joints, D/F Pipes & Specials folders
7	M/s.Lokesh Aqua products	Aqua feed and Poultry feed

**Source:** Computed.

**The leadership styles in the single unit manufacturing enterprises in Industrial Estate**

The researcher took notes while filling the schedules in a casual and face to face interview which can be designated as case study method. The researcher noted that the 7 single unit manufacturing enterprises mentioned in the table were started as proprietary business organisations. They have evolved into competitive units with their chosen lines of activity. The leaders in these units were not techno-savvy, but their association and convincing nature to attractive technocrats to assist them in production, deserve special mention as convincing and winning entrepreneurs. The entrepreneur takes up an idea, explains it to the partners or factors of production required to produce and impress upon them to accept his proposal to work together to improve all of them economically, but the researcher has identified the autocratic style of leadership as a special feature of entrepreneurial leadership. The leader identified himself first as an entrepreneur evolved into a leader acquiring leadership qualities appropriate to the time and production process of the desired product.

Though the style is autocratic it impressed the followers as entrepreneurial leadership, sometimes allowing participatory leadership techniques also.

**The leadership styles in 2 unit manufacturing units**

There are 6 two-unit manufacturing enterprises the details of which are given in table 3.

Table3 Activity-wise, two unit manufacturing enterprises taken for study

S. No.	Manufacturing Enterprise	Line of activity
1	M/s.Winfield Chemicals India Ltd.	Pesticides & Insecticides
2	M/s.Ravi Industries	Reclamation of used Engine Oils
3	M/s.Kwality Kitchen Wear (LM)	Kitchen Ware Items
4	M/s.Lakshmi Structural	Oil Tanks Fabrications
5	M/s.Lokesh Aqua Products Pvt. Ltd., (LM)	Aqua Feed/Poultry Feed
6	M/s.Modern Food Products (LM)	Saucers & Jams
7	M/s.Metal Masters	Chairs & Furnitures
8	M/s.Nagas Rubber Works (LM)	Tread Rubber
9	M/s.R & R Industries (Life Member)	All Kinds fabricators, oil tanks, water tanks, storage tanks
10	M/sSri baba Hydro Forms	Manufacturing of hospital Furniture, Electrical Boxes
11	M/s.Vijaya Foods	Spencer's Bread & Products
12	M/s. Vijaya Industries	Aerated Water & Purified Water

**Source:** Computed.

**Note:** The leader of M/s.Vijaya Foods is a woman entrepreneur.

In the 12 firms shown in the table, the leadership style can be designated as essentially benevolent autocratic in nature, but business interests takes center stage to adopt combined leadership styles keeping entrepreneurial leadership in driver seat. The researcher has noted that the sons and daughters of the owners of proprietary concerns after qualifying themselves as specialists in agro-pharmaceuticals and other fields of productive and managerial activity themselves take responsibility of leading the firms without hiring a qualified management graduate or management consultant or management specialists and experts.

M/s. Vijaya Foods and its management, is an indicator of women empowerment as the ownership and maintenance is in the hands of a woman. Woman administrators and officials are also found in these companies.

The three unit manufacturing business enterprises produce pesticides, chemicals and some of them undertake body building of transport vehicles also. The particular are shown in table 4.

Table 4 Activity-wise, three unit manufacturing enterprises taken for study

S. No.	Manufacturing Enterprise	Line of activity
1	M/s. Winfield Chemicals India Ltd.,	Pesticides & Insecticides
2	M/s. Agrind Chemicals	Chemicals, Fertilisers & Zinc Sulphate
3	M/s. Durga Industries	Body Building, Tipper & All types

**Source:** Computed.

In these three unit manufacturing enterprises named in the table, the leadership style is autocratic leadership styles is followed. The entrepreneurs leading these companies are from business families wedded to principles of business and profit making besides promoting health of the organization in terms of quality production and employment generation and satisfactory maintenance of labour relations.

The line of activity-wise details of four unit enterprising companies are furnished in table 5.

Table 5 Activity-wise, four unit manufacturing enterprises taken for study

S. No.	Manufacturing Enterprise	Line of activity
1	M/s. J. K. Steels	M. S. Builders & hardware
2	M/s. Kwaliti Kitchen Wear	Kitchen Wear Items
3	M/s. Meridian chemicals Pvt. Ltd.	Veterinary Drugs, Feed Supplements

Source: Computed.

The four unit manufacturing enterprises manufacture building equipment and hardware products. There are units which make kitchen ware, while other units produce veterinary drugs, and feed supplements. These units are owned by big Industrial houses. There are industry oriented entrepreneurs belonging to particular families who practice family traditions in continuing their lines of productive activity. These families own the business and pass on their legacy to the descendents. The policies are also declared to be followed by the working staff. This type of leadership in promoting business activity is "strict autocratic leadership style". The traditional business orientation itself imparts valuable lessons to the progeny to carry on the practice of autocratic leadership. These units are observed to engage technical experts and financial experts as per needs to participate in making decisions with the regard to production plans and financial management. The ancestors of the owners are business giants. The present generation also lead these companies on virtually business principles and entrepreneurial reach-the-goal practices.

Vijayawada is known for its automotive industrial activity. The very name of Autonagar is derived from the automobile industrial activities. Before the establishment of Autonagar many auto repair sheds were located on the back yards of large residential houses. The auto-mechanics hired for rent pieces of vacant land to carry on auto works. Later, the auto industry developed and many lines of activity are taken up. In the entire Industrial estate of Vijayawada highest number of industrial units is automotive industrial units. The details of these units are given in table 6.

Table 6 Activity-wise, unit manufacturing enterprises taken for study

S. No.	Manufacturing Enterprise	Line of activity
1	Atma Lubricants & Specialities Ltd.	Processor Automobile industries Lubricants & specialists
2	AL Mahammadiya Automobile Engineering works	General work, Automobile works
3	M/s. Sambasiva Distributors	Wheel Bolts & Nuts
4	M/s. Sri Durga Industries	Wire Drawing, Bolts Rivets
5	M/s. Durga Bhavani Automobile works	Automobile Foundry servicing and automobile work
6	M/s. Srinivasa Industries	All Bolts, Nuts, lamps, Jackeys and their special components.
7	M/s. Sri Sai Ram Motor Works	Engine Reconditioner
8	M/s. Universal Auto Parts	Automobile Spare
9	M/s. Venkata Marthi Diesel Works	Fuel Injection service
10	M/s. Prasad Industries	Motor Cycle Extra Fittings
11	M/s. Lakshmi Structural	Electroplating job works
12	M/s. R. R. Industries	All kinds of Fabrications
13	M/s. Ramesh Auto Industries	Automobiles components, U-clamps, centre body bolts

Source: Computed.

Automobile workshops undertake production of wheel bolts and nuts, automobile foundry service, production of automobile spare parts, building of oil tanks, water tanks and storage tanks and all kinds of fabrications. The manufacturing of auto and related products to make Autonagar a hub of various types of industrial works. The owners of these enterprises were once learners under technical experts working sometimes as child labourers. Thus became owners of the enterprises, gaining experience and expertise. They are ordinary citizens with no major financial assets to their credit. The allotment of plots and other developmental services provided by the Government led the auto industry grow in size to the present stage of 24 hour a day industrial activity. All these enterprises are business enterprises with the owners gaining expertise in automobile and mechanical engineering works. There were child apprentices in the early stages of Autonagar and now became owners of foundries and expert mechanics in their respective lines of activity. These owners follow strict autocratic leadership model to carry on business to the satisfaction of the followers and other workers and the entrepreneurial leadership techniques were faithfully followed.

The researcher noted that many of these units take orders from contractors or other large workshop owners to produce different products. These owners hire labourers and technical assistants on contract basis. After the contract is over, the same labourers and technical experts are preferred to produce the products as per the new orders placed. These orders are for the production of automobile instruments and implements required. In some cases advance payments are also made for making products. These preferred labourers find a sort of assured employment and thus are not unhappy because of some sort of guarded employment opportunities.

The researcher also noted that there are some labour welfare activities not according to the strict provisions of labour laws, but based on humanitarian grounds. The owners provide for medical facilities free of cost to the labourers when they are unable to work due to medical reasons and afflictions to body occurred while producing the products and working on different types of machines located in foundry works, iron fabrications and castings.

The second highest manufacturing industrial enterprises, make metal utensils. Stainless steel and aluminum glasses and other vessels are made to the orders of businessmen. The line of activity-wise enterprises are provided in table 7.

Table7 Stainless steel and aluminum based manufacturing units in industrial estate

S. No.	Manufacturing Enterprise	Line of activity
1	M/s. Aparna Metal Industries	Stainless Steel, Utensils
2	M/s. Ghanasyam Industries	Stainless Steel, Utensils
3	M/s. Ghanasyam Metal works	Stainless Steel, Utensils
4	M/s. Jaya Sai Jyothi Metal works (P) Ltd.,	Stainless Steel, Utensils
5	M/s. Padmasri Industries	Aluminum utensils
6	M/s. Rama Industries	Stainless steel, utensils
7	M/s. Sunlight Metal Ware Industries	Aluminum an stainless steel utensils
8	M/s. Swastik Industries	Stainless steel utensils
9	M/s. SRBH Metal Industries	Stainless steel, Utensils
10	M/s. Sri Venkata Siva Rama Krishna Metal Works	Aluminum vessels
11	M/s. Sri Swamy Ayyappa Metal Industries (P) Ltd.,	Stainless steel, utensils
12	M/s. Sri Satya Sai Metal Industries	Stainless steel utensils

The researcher found that the most labour employing production companies are those engaged in making stainless steel and aluminum utensils and vessels. There are 12 manufacturing units undertaking metal based industrial activity. Stainless steel items, utensils, aluminum vessels are manufactured as per the orders received every day. The volume of production determines the number of days, the number of labourers to be hired on some fixed wages. Piece rate wages are also found to be in operation. The labour intensive sector offers employment to almost 300 to 500 labourers and workers every day. The activity provides demand for associated industrial activities like packaging, transporting etc. The researcher found out from the labourers, workers and others that this sector is essential for daily wagers also, because of increase in unexpected demand for such products. The producers do not continue to operate if the prices of their products do not cover their variable costs. Variable costs are those which vary with the volumes of production.

The situation of labourers and their problem are also studied and the conditions of work and labour welfare are recorded.

The Researcher observed the conditions of work and benefits available to the workers. It is observed that there are some flexibility practices in implementation of labour legislation. The manufacturing companies in the industrial estate do not strictly implement labour legislation as the practice of hiring and firing labourers is deeply rooted. The researcher also observed in front of companies both showing that there are no vacancies and there are no permanent employees. The researcher observed that daily wagers work for agreed payment on piece-rate basis. Mostly contracted labourers in production process. The researcher contacted 50 workers including 10 women workers and recorded their answers with respect to labour practices. The questions pertain to implementation of acts on minimum wages, employment security and job benefits. The working conditions refer to the hours of work, rest rooms, wash rooms availability of separate toilets for women, lunch rooms, transport facilities etc. The details of working conditions are provided in table 8.

Table8 Working conditions of labour in the manufacturing companies in Industrial Estate

S. No.	Working conditions	Implementation			
		No. of Respondents			
		Satis-factory	Not satis-factory	Does not arise	Total
1	Implementation of minimum wages act	4	-	46	50
2	Employment security	4	-	46*	50
3	Job Security	4	-	46	50
4	Working hours	4	=	46**	50
5	Rest rooms	4	20	26	50
6	Wash rooms	4	30	16	50
7	Separate toilets for women	4	6	-	10
8	Lunch rooms	4	20	26	50
9	Transport facilities	40	10	-	50
10	ESI Act	4	-	46	50
11	Medical Assistance	-	50	-	50
12	Canteens at subsidized rates	4	-	46	50
13	Any other benefits	4	-	46	50

Source: Computed.

**Note:** \*There are labourers who are preferred based upon their previous experience as old workers. This facility of reappointing the same workers is a sort of assurance to offer work. But it cannot be considered as employment security.

\*\*The working hours are usually 8 hours a day, but the piece rate working contracts enable the workers complete their productive activity in the hours conveniently fixed by them. So, the 8 hour working day does not arise.



The table furnishes that the four highly reputed and well administered and managed companies provide statutory benefits as per the minimum wages, act employment security, job security, working hours, rest rooms and other facilities at working place, as per the relevant Acts. The Employees State Insurance Act is implemented in these 4 units. The canteens are not maintained by the companies, but some private canteen owners supply the food items, snacks and tea at concessional rates. This can be considered as facilities through canteens supplying items at subsidized rates.

The Vijayawada Industrial Estate Manufacturers Association with the cooperation of NGOs and International spiritual organisations like ISKCON (International Society for Krishna Consciousness) arrange free supply of food and free gifts on festive occasions which benefits most of the workers in the industrial estate. There are programmes like *Akshya Patra* (a magic vessel from which food items follow ceaselessly). The International service societies like Lions Club, and the Rotary International arrange free medical camps and donate funds for free drinking water supply to all including the workers. These can be cited as other benefits.

The 10 women labourers make use of special toilets for women constructed by the company or by the NGOs (Non-Governmental Organisations). In the case of rest rooms and lunch rooms, only 20 are formed using them though they are not satisfactory in respect of proper upkeep. Wash rooms are also not available in highly hygienic conditions. The researcher noted that the owners of companies on humanitarian grounds extend medical assistance by providing caste to buy medicines. 46 respondents said they receive benefits in the category of other benefits frequently. The ESI Act is implemented only in the 4 well-established companies. The labourers who are engaged on contract basis are found making their own arrangements.

In addition to the manufacturing units mentioned in the tables, there are special and outstanding industrial units which the researcher approached for special study to understand the leadership styles. Four of such units are examined along with their lines of activity and their standing in the industrial estate. The details are presented, as special cases of study.

#### **Case study 1: M/s. Mytreya Pvt. Ltd.,**

The Mytreya Electricals Pvt Ltd., dealers in the Electrical goods is 26 years old. It was registered as a small scale industrial unit, is known as manufacturers and repairs of distribution and power transformers. The company was certified under ISO 9001-2015, and its customers are Andhra Pradesh State Electricity Board, Vijayawada Thermal Power Station. It is a supplier of products to many other reputed government and Private organisations, Rice Mills, Crushers, Spinning mills, cold storages, cement plants, and the Central Institute of Plastic Engineering and Technology. The leadership style is autocratic leadership style. The company is found adopting team building leadership technic styles also.

#### **Case study 2: M/s. Maram Polymers Ltd.**

The company was established in 1949 to undertake iron business, and became a plastic goods manufacturing and finally grew into unit in 1969, and finally grew in to M/s.

Maram Polymers Limited in 1995. At present, the third generation of Maram family, supplies packing bottles to multi-national companies, and also produces plastic containers to Ponds India, Indian Oil Corporation, and Nagarjuna Fertilisers. The Ushodaya Private Limited has preferred the company's products. The company is recognized by the government as the best industry and it obtained ISO certificate. It also deals in iron trading, medicine and edible oils as distributors. The leadership of style in this company is autocratic leadership style and the characteristics of managing agency system also reflect in the maintenance of the company affairs.

#### **Case Study 3 : M/s. Maheswari Graphite Udyog Pvt. Ltd.**

The company was established in 1962 and has a brand name 'Jwala' and it is approved by ISI. It is now maintained by second generation of the family the Maheswari group as manufacturers of graphite crucibles. The company supplies graphite crucibles to all major railways and other public sector companies and many small and big industries throughout the country. The leadership is entrepreneurial leadership style with its firm roots in autocratic style of leadership.

#### **Case study 4 : M/s. J.C. Graphics Pvt. Ltd.**

The group caught the attraction of various companies and serves the needs of packaging and other types of printing. It also extends valuable services to multi-national corporations and promoters of exporters. Recently it obtained the award, the ISO certificate as India's first print shop with ISO 12647-2 standards, certified by Heidelberg Germany for the machine Heidel Berg Speed Master CD 102 six colour UN press. The machine was imported at a cost of about Rs.20 crore. The firm is now controlled by the third generation of the J.C. Group. It was established in 1950 and in 1995 it developed into Number 1 in Graphics sector in Andhra Pradesh.

The leadership of style in this company can be designated as benevolent autocratic leadership style. But the company also takes into consideration, the recommendations and suggestions of the senior working technical experts and staff. The style is a combination of benevolent autocratic entrepreneurial leadership and participative leadership style.

## **4. FINDINGS AND SUGGESTIONS**

### **Findings**

1. The major finding of the study is that no pure theoretically oriented style of leadership is being adopted in all the manufacturing units taken for study. The most important style of leadership passing through different combinations of styles of leadership is the entrepreneurial leadership which combines qualities of both entrepreneur and leader.
2. Increasing costs leading to limited upgradation of technology is a problem to be addressed immediately.
3. Heavy competition due to globalization in terms of import of cheap Chinese good is a threat to comparatively costlier products produced in the industrial estate.
4. It is also found that Chinese goods are competing with native goods fixing prices at 50 to 60 per cent lower than the prices of the goods made locally.



5. Some companies reported that the installed capacity is underutilized due to lack of market for them.
6. The growth rate of the manufacturing sector is observed to be falling.
7. The study also found that the impact of globalization hit hard the business of smaller units in the study area.
8. There are some units limping to achieve profitable production stage, because of severe competition from large scale industries in and around Vijayawada and other states.
9. The micro and medium enterprises are also not in a healthy position and are passing through industrial crisis due to lack of adequate financial and other facilities for industrial development.
10. There is a strong feeling among producers that when buyers fix the prices for the products and the markets is a buyer's market, the manufacturing industries in the study area will not grow-up.
3. The technology upgradation scheme may be implemented though the labourers are on contract basis.
4. The national manufacturing competitive programme 2005 may be implemented so that its benefit encourages industrial production.
5. The public procurement of goods produced programme may be extended to many more entrepreneurs.
6. All the schemes which aim at promoting entrepreneurship should be implemented by a special implementing authority which can identify encourage and monitor the industrial production activity, so as to promote leadership in different styles which are now being adopted in the study area.
7. Imposing dumping duties on foreign made goods will not make a country, state or industrial area a dumping ground.
8. Interest rates and royalties may be extended so that entrepreneurs get benefitted. The interest rate should at least be reduced by 2 per cent as expected by the leaders of the units.
9. Implementation of entrepreneurial trading programme for prospective industrial leaders enhances leadership activities, so that industrialisation on a larger scale would take place.
10. A data base may be created for the benefit of prospective industrialists along with measures to create an atmosphere for industrial renaissance in the present days of recession.

### Suggestions

1. Finance is the life blood of economic activity and inadequate finance is the problem faced by most of the companies. Credit guarantee trust scheme fund established in the year 2000 is not of great use, because of the lacuna in rules and regulations governing in the implementing agencies.
2. The credit linked capital subsidy scheme is to be extended on terms agreeable and acceptable to the companies.